State-of-the-College of Engineering

Associate Dean Jack Lesko for Dean Don Taylor
Sending Regrets

Positioning the CoE in this time of change
Buildings and Space

Stable Leadership
Advancement
CoE Awards & Research Expenditures

75% Federal and Federal Flow Through, 12% Corporate, 10% State, 3% Foundations/Other
The “Benson Pie Chart”

$314 Million Operation

- $148.37: Direct Research
- $67.74: Tuition
- $37.19: Indirect to COE
- $12.23: Indirect to VT
- $5.74: VT Foundation
- $1.28: Indirect to COE
- $23.20: Engineering Fee
- $18.35: State Allocation

Total: $314 Million Operation
The “Benson Chart” - Historic

- Annual Giving
- VT Foundation
- Indirect to VT
- Indirect to COE
- Direct Research
- Engineering Fee
- Tuition
- State Allocation

Graph shows annual giving across fiscal years FY2005 to FY2016.
CoE Historic Enrollment

360 TT Faculty

~22.4 UG/TT Faculty

~6.4 G/TT Faculty
### Undergraduate Entering Class Diversity

<table>
<thead>
<tr>
<th>Category</th>
<th>2005 #</th>
<th>2005 %</th>
<th>2016 #</th>
<th>2016 %</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>1130</td>
<td>100.0%</td>
<td>1734</td>
<td>100.0%</td>
</tr>
<tr>
<td>Men</td>
<td>951</td>
<td>84.2%</td>
<td>1327</td>
<td>76.5%</td>
</tr>
<tr>
<td>Women</td>
<td>179</td>
<td>15.8%</td>
<td>407</td>
<td>23.5%</td>
</tr>
<tr>
<td>Asian-American</td>
<td>69</td>
<td>6.1%</td>
<td>378</td>
<td>21.8%</td>
</tr>
<tr>
<td>African-American</td>
<td>22</td>
<td>2.0%</td>
<td>41</td>
<td>2.4%</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>18</td>
<td>1.6%</td>
<td>91</td>
<td>5.3%</td>
</tr>
<tr>
<td>Multiple Races</td>
<td></td>
<td></td>
<td>73</td>
<td>4.2%</td>
</tr>
<tr>
<td>Unreported Race</td>
<td>135</td>
<td>12.0%</td>
<td>62</td>
<td>3.6%</td>
</tr>
</tbody>
</table>
CoE Graduate Offers and Enrolled

Fall 2015
(MS + PhD = Total Grad Class)
924 + 1331 = 2255

43% Yield – 2015
(Enrolled/Offered)

Resulting in +72 GTA positions added to base budget
Entering Graduate Class

- Black M/F entering PhD students have grown from 1.8% to 2.5%
- Diversity of our entering PhD’s has increased (Black, Hispanic, American Indian and 2 or more races) ~3.5% to ~6.2%
Doctoral Enrollment by Gender

Female Doctoral graduate enrollment has increased ~14% since 2011 (blue line and data below 250 to 284)
Undergraduate Ranking

U.S. News & World Report

Our undergraduate ranking has been 15, ± 2 for the last decade.

In the same time, our graduate ranking has moved up ten spots from 31 to 21.

<table>
<thead>
<tr>
<th>Undergraduate</th>
<th>16 Virginia Tech</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 MIT</td>
<td>16 Texas A&amp;M</td>
</tr>
<tr>
<td>1 Stanford</td>
<td>18 Columbia</td>
</tr>
<tr>
<td>3 UC Berkeley</td>
<td>18 Duke</td>
</tr>
<tr>
<td>4 Cal Tech</td>
<td>18 Penn State</td>
</tr>
<tr>
<td>4 Georgia Tech</td>
<td>18 Rice</td>
</tr>
<tr>
<td>6 Illinois</td>
<td>18 UC Los Angeles</td>
</tr>
<tr>
<td>6 Michigan</td>
<td>18 Washington</td>
</tr>
<tr>
<td>8 Carnegie Mellon</td>
<td>24 UC San Diego</td>
</tr>
<tr>
<td>9 Purdue</td>
<td>24 Maryland</td>
</tr>
<tr>
<td>9 Cornell</td>
<td>24 Minnesota</td>
</tr>
<tr>
<td>11 Princeton</td>
<td>24 Pennsylvania</td>
</tr>
<tr>
<td>11 Texas Austin</td>
<td>28 Harvard</td>
</tr>
<tr>
<td>13 Northwestern</td>
<td>28 Ohio</td>
</tr>
<tr>
<td>14 Johns Hopkins</td>
<td>28 UC Davis</td>
</tr>
<tr>
<td>14 Wisconsin</td>
<td>28 Southern California</td>
</tr>
</tbody>
</table>
In the same time, our graduate ranking has moved up ten spots from 31 to 21.

* VT would move up 6 places to 15 if the grad ranking was based solely on reputation.
Looking Forward
Led by Provost Thanassis Rikakis, the university is promoting five “destination areas” for focused research investment and cross-cutting fields of study:

- Adaptive Brain and Behavior
- Data Analytics and Decision Sciences
- Resilient Earth Systems (Infectious Disease)
- Integrated Security
- Intelligent Infrastructure for Human Centered Communities
- Health Science & Technology – focus on Roanoke

The College of Engineering will be a major contributor in all five destination areas.
Virginia Tech
Intelligent Infrastructure and Human Centered Communities
Innovation Test Sites
September 2016
Thank You for all you do for the CoE!